

## TABLE OF CONTENTS

### Book

- Bowman, D.M.J.S. (2000). *Australian rainforests. Islands of green in a land of fire.*  
(Cambridge University Press: Cambridge.) 1

### Articles

- Bowman, D.M.J.S. (1986). Stand characteristics, understorey associates and environmental correlates of *Eucalyptus tetradonta* F. Muell. forests on Gunn Point, northern Australia. *Vegetatio* **65**, 105-113. 352
- Bowman, D.M.J.S. (1988). Stability amid turmoil?: towards an ecology of north Australian eucalypt forests. *Proceedings of the Ecological Society of Australia* **15**, 149-159. 361
- Bowman, D.M.J.S. (1991a). Environmental determinants of *Allosyncarpia ternata* forests that are endemic to western Arnhem Land, northern Australia. *Australian Journal of Botany* **39**, 575-589. 372
- Bowman, D.M.J.S. (1991b). Recovery of some northern Australian monsoon forest tree species following fire. *Proceedings of the Royal Society of Queensland* **101**, 21-25. 387
- Bowman, D.M.J.S. (1992a). Monsoon forests in north-western Australia. II. Forest-savanna transitions. *Australian Journal of Botany* **40**, 89-102. 392
- Bowman, D.M.J.S. (1992b). Towards a definition of Australian rainforest types: The Northern Territory Experience. In *Victoria's rainforests: perspectives on definition, classification and management* (eds. P. Gell and D. Mercer) pp. 163-165. (Monash Publications in Geography No. 41: Melbourne.) 406

- Bowman, D.M.J.S. (1992c). Evidence for gradual retreat of dry monsoon forests under a regime of Aboriginal burning, Karslake Peninsula, Melville Island, northern Australia. *Proceedings of the Royal Society of Queensland* **102**, 25-30. 409
- Bowman, D.M.J.S. (1993). Establishment of two dry monsoon forest tree species on a fire-protected monsoon forest-savanna boundary, Cobourg Peninsula, northern Australia. *Australian Journal of Ecology* **18**, 235-237. 415
- Bowman, D.M.J.S. (1994). Preliminary observations on the mortality of *Allosyncarpia ternata* stems on the Arnhem Land Plateau, northern Australia. *Australian Forestry* **57**, 62-64. 418
- Bowman, D.M.J.S. (1995). Two examples of the role of ecological biogeography in Australian prehistory: The fire ecology of *Callitris intratropica*, and the spatial pattern of stone tools in the Northern Territory. *Australian Archaeology* **41**, 8-11. 421
- Bowman, D.M.J.S. (1998). Tansley Review - The impact of Aboriginal landscape burning on the Australian biota. *New Phytologist* **140**, 385-410. 425
- Bowman, D.M.J.S. and Brown, M.J. (1986). Bushfires in Tasmania: a botanical approach to anthropological questions. *Archaeology in Oceania* **21**, 166-71. 451
- Bowman, D.M.J.S. and Connors, G.T. (1996). Does low temperature cause the dominance of *Acacia* on the central Australian mountains? Evidence from a latitudinal gradient from 11° to 26° South in the Northern Territory, Australia. *Journal of Biogeography* **23**, 245-256. 457
- Bowman, D.M.J.S. and Dunlop, C.R. (1986). Vegetation pattern and environmental correlates in coastal forests of the Australian monsoon tropics. *Vegetatio* **65**, 99-104. 469

- Bowman, D.M.J.S. and Fensham, R.J. (1991). Response of a monsoon forest-savanna boundary to fire protection, Weipa, northern Australia. *Australian Journal of Ecology* **16**, 111-118. 475
- Bowman, D.M.J.S. and Fensham, R.J. (1995). Growth of *Eucalyptus tetrodonta* seedlings on savanna and monsoon rainforest soils in the Australian monsoon tropics. *Australian Forestry* **58**, 46-47. 483
- Bowman, D.M.J.S. and Harris, S. (1995). Conifers of Australia's dry forests and open woodlands. In *Ecology of the southern conifers* (eds. N.J. Enright and R.S. Hill) pp. 252-270. (University of Melbourne Press: Melbourne.) 485
- Bowman, D.M.J.S. and Jackson, W.D. (1981). Vegetation succession in southwest Tasmania. *Search* **12**, 358-362. 504
- Bowman, D.M.J.S. and Latz, P.K. (1993). Ecology of *Callitris glaucophylla* (Cupressaceae) on the MacDonnell Ranges, central Australia. *Australian Journal of Botany* **41**, 217-225. 509
- Bowman, D.M.J.S., Latz, P.K. and Panton, W.J. (1994). Pattern and change in an *Acacia aneura* shrubland and *Triodia* hummock grassland mosaic on rolling hills in central Australia. *Australian Journal of Botany* **43**, 25-37. 518
- Bowman, D.M.J.S., Maclean, A.R., and Crowden, R.K. (1986). Vegetation-soil relations in the lowlands of south-west Tasmania. *Australian Journal of Ecology* **11**, 141-153. 531
- Bowman, D.M.J.S. and McDonough, L. (1991). Tree species distribution across a seasonally flooded elevation gradient in the Australian monsoon tropics. *Journal of Biogeography* **18**, 203-212. 544

- Bowman, D.M.J.S. and Minchin, P.R. (1987). Environmental relationships of woody vegetation patterns in the Australian monsoon tropics. *Australian Journal of Botany* **35**, 151-169. 554
- Bowman, D.M.J.S. and Panton, W.J. (1993a). Decline of *Callitris intratropica* R.T. Baker & H.G. Smith in the Northern Territory: implications for pre- and post-European colonization fire regimes. *Journal of Biogeography* **20**, 373-381. 573
- Bowman, D.M.J.S. and Panton, W.J. (1993b). Factors that control monsoon-rainforest seedling establishment and growth in north Australian *Eucalyptus* savanna. *Journal of Ecology* **81**, 297-304. 582
- Bowman, D.M.J.S. and Panton, W.J. (1993c). Differences in the stand structure of *Eucalyptus tetrodonta* forests between Elcho Island and Gunn Point, northern Australia. *Australian Journal of Botany* **41**, 211-215. 590
- Bowman, D.M.J.S. and Panton, W.J. (1994). Fire and cyclone damage to woody vegetation on the north coast of the Northern Territory, Australia. *Australian Geographer* **25**, 32-35. 595
- Bowman, D.M.J.S. and Panton, W.J. (1995). Munmarlary revisited: response of a north Australian *Eucalyptus tetrodonta* savanna protected from fire for 20 years. *Australian Journal of Ecology* **20**, 526-531. 599
- Bowman, D.M.J.S., Panton, W.J. and Head, J. (1999). Abandoned Orange-footed Scrubfowl (*Megapodius reinwardt*) nests and coastal rainforest boundary dynamics during the late Holocene in monsoonal Australia *Quaternary International* **59**, 27-38. 605
- Bowman, D.M.J.S., Panton, W.J. and McDonough, L. (1990). Dynamics of forest clumps on chenier plains, Cobourg Peninsula, Northern Territory. *Australian Journal of Botany* **38**, 593-601. 617

- Bowman, D.M.J.S. and Rainey, I. (1995). Tropical tree stand structures on a seasonally flooded elevation gradient in northern Australia. *Australian Geographer* **27**, 31-37. 626
- Bowman, D.M.J.S. and Wightman, G.M. (1985). Small scale vegetation pattern associated with a deeply incised gully, Gunn Point, northern Australia. *Proceedings of the Royal Society of Queensland* **96**, 63-73. 633
- Bowman, D.M.J.S. and Wilson, B.A. (1988). Fuel characteristics of coastal monsoon forests, Northern Territory, Australia. *Journal of Biogeography* **15**, 807-817. 644
- Bowman, D.M.J.S., Wilson, B.A. and Dunlop, C.R. (1988). Preliminary biogeographic analysis of the Northern Territory vascular flora. *Australian Journal of Botany* **36**, 503-17. 655
- Bowman, D.M.J.S., Wilson, B.A. and Fensham, R.J. (1999). Relative drought tolerance of evergreen-rainforest and evergreen-savanna species in a long unburnt *Eucalyptus* savanna, north Queensland, Australia. *Proceedings of the Royal Society of Queensland* **108**, 27-31. 670
- Bowman, D.M.J.S., Wilson, B.A. and Hooper, R.J. (1988). Response of *Eucalyptus* forest and woodland to four fire regimes at Munmarlary, Northern Territory, Australia. *Journal of Ecology* **76**, 215-232. 675
- Bowman, D.M.J.S., Wilson, B.A. and McDonough, L. (1991). Monsoon forests in northwestern Australia I. Vegetation classification and the environmental control of tree species. *Journal of Biogeography* **18**, 679-686. 693
- Bowman, D.M.J.S., Wilson, B.A. and Woinarski, J.C.Z. (1991). Floristic and phenological variation in a northern Australian rocky *Eucalyptus* savanna. *Proceedings of the Royal Society of Queensland* **101**, 79-90. 701

- Bowman, D.M.J.S. and Woinarski, J.C.Z. (1994). Biogeography of Australian monsoon rainforest mammals: implications for the conservation of rainforest mammals. *Pacific Conservation Biology* **1**, 98-106. 713
- Bowman, D.M.J.S., Woinarski, J.C.Z., and Menkhorst, K.A. (1993). Environmental correlates of tree species diversity in Stage III of Kakadu National Park, northern Australia. *Australian Journal of Botany* **41**, 649-660. 722
- Bowman, D.M.J.S., Woinarski, J.C.Z. and Russell-Smith, J. (1994). Environmental relationships of Orange-footed Scrubfowl *Megapodius reinwardt* nests in the Northern Territory. *Emu* **94**, 181-185. 734
- Choquenot, D. and Bowman, D.M.J.S. (1998). Marsupial megafauna, Aborigines and the overkill hypothesis: application of predator-prey models to the question of Pleistocene extinction in Australia. *Global Ecology and Biogeography Letters* **7**, 167-180. 739
- Fensham, R.J. and Bowman, D.M.J.S. (1995). A comparison of foliar nutrient concentration in trees from monsoon rainforest and savanna in northern Australia. *Australian Journal of Ecology* **20**, 335-339. 753
- Jackson, W.D. and Bowman, D.M.J.S. (1982a). Reply: Ecological drift or fire cycles in south-west Tasmania. *Search* **13**, 175-176. 758
- Jackson, W.D. and Bowman, D.M.J.S. (1982b). Comment: slashburning in Tasmanian dry eucalypt forests. *Australian Forestry* **45**, 63-67. 760
- Kirkpatrick, J.B., Fensham, R.J., Nunez, M. and Bowman, D.M.J.S. (1988). Vegetation-radiation relationships in the wet-dry tropics: granite hills in northern Australia. *Vegetatio* **76**, 103-112. 765
- Pole, M.S. and Bowman, D.M.J.S. (1996). Tertiary plant fossils from Australia's 'Top End'. *Australian Systematic Botany* **9**, 113-126. 775

- Price O. and Bowman, D.M.J.S. (1994). Fire-stick forestry: a matrix model in support of skilful fire management of *Callitris intratropica* R.T. Baker by north Australian Aborigines. *Journal of Biogeography* **21**, 573-580. 789
- Russell-Smith, J. and Bowman, D.M.J.S. (1992). Conservation of monsoon rainforest isolates in the Northern Territory, Australia. *Biological Conservation* **59**, 51-63. 797
- Russell-Smith, J., Lucas, D.E., Brock, J. and Bowman, D.M.J.S. (1993). *Allosyncarpia*-dominated rain forest in monsoonal northern Australia. *Journal of Vegetation Science* **4**, 67-82. 810

# Australian rainforests

**Islands of green in a land of fire**

**D.M.J.S. Bowman**

Northern Territory University, Australia



**CAMBRIDGE**  
UNIVERSITY PRESS



**PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE**  
**The Pitt Building, Trumpington Street, Cambridge, United Kingdom**

**CAMBRIDGE UNIVERSITY PRESS**

The Edinburgh Building, Cambridge CB2 2RU, UK [www.cup.cam.ac.uk](http://www.cup.cam.ac.uk)

40 West 20th Street, New York, NY 10011-4211, USA [www.cup.org](http://www.cup.org)

10 Stamford Road, Oakleigh, Melbourne 3166, Australia

Ruiz de Alarcón 13, 28014 Madrid, Spain

© D.M.J.S. Bowman 2000

This book is in copyright. Subject to statutory exception  
 and to the provisions of relevant collective licensing agreements,  
 no reproduction of any part may take place without  
 the written permission of Cambridge University Press.

First published 2000

Printed in the United Kingdom at the University Press, Cambridge

Typeface 9.25/14pt. minion

*A catalogue record for this book is available from the British Library*

*Library of Congress Cataloguing in Publication data*

Bowman, D. M. J. S.

Australian rainforests: islands of green in a land of fire /

D.M.J.S. Bowman.

p. cm.

Includes bibliographical references.

ISBN 0 521 46568 0 (hb)

1. Rain forest ecology - Australia. 2. Fire ecology - Australia.

3. Fragmented landscapes - Australia. I. Title.

QK431.B67 2000

577.34'0994-dc21 99-24978-CIP

ISBN 0 521 46568 0 hardback